

# SWIFT AND THE GLOBAL TELESCOPE

**NETWORK** 









## THE GLOBAL (NEE GLAST) TELESCOPE NETWORK

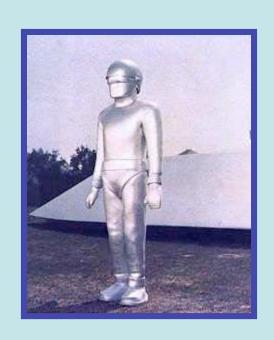


- Network of ground-based telescopes
- Purpose: to support GLAST, Swift and XMM-Newton science, and educate students about astronomy by partnering with NASA scientists
- Partners:
  - Sonoma State University E/PO Group
  - AAVSO
  - Hands On Universe Project (Yerkes)
  - Elk Creek Observatory (Kansas)
  - California Academy of Sciences
  - WIRO (Wyoming + 2 other possible locations)
- Actively recruiting other partners (VERITAS?)



# GORT (GLAST OPTICAL ROBOTIC TELESCOPE)





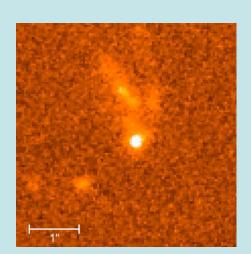
The original GORT

- Celestron 14" Paramount/AP47P
- CCD and filter wheel
- Pepperwood Preserve, Hume Observatory (California Academy of Sciences)
- About 30 minutes north of SSU



#### **GTN SCIENCE PROJECTS**

- Active galaxy, polar surveillance
  - V and I observations of 2 targets / month
  - − S/N >100, photometry ~1%
- High time-resolution datasets
  - Microvariability
  - Observe one target for many hours
  - At least once/year
- Gamma-ray bursts
  - Rapid response (GCN notification)
  - High S/N, but fast, multiple images more critical





#### **GTN EDUCATIONAL PROJECTS**

Simple image reduction

and analysis

- Hands-On Universe
- AAVSO cooperation
- Educational unit (under development)





#### Goals:

- Combine gamma-ray and visible light data
- Partner with scientists to publish data in scientific journals



### JOIN THE GTN

What/Who are we looking for?

- Observers with access to telescopes w/CCD
- Willing to observe a minimum amount (depends on project)
- Willing to have data archived and used by others
- Not up for a long-term commitment?
   Go through the AAVSO!
- Swift scientists to partner with our ground-based partners



### **GTN PARTNER BENEFITS:**

#### Real science with real scientist partners!

- Submit proposals to acquire data if you do not have your own visible-light telescope
- GRB Astrometry analysis
- GRB Photometry analysis
- Data archiving at SSU
- Light curves reported through AAVSO

FOR MORE INFORMATION: http://gtn.sonoma.edu

Pepperwood dome

